PREFATORY NOTE

These transcripts have been produced from the original raw transcripts in the FOMC Secretariat's files. The Secretariat has lightly edited the originals to facilitate the reader's understanding. Where one or more words were missed or garbled in the transcription, the notation "unintelligible" has been inserted. In some instances, words have been added in brackets to complete a speaker's thought or to correct an obvious transcription error or misstatement.

Errors undoubtedly remain. The raw transcripts were not fully edited for accuracy at the time they were produced because they were intended only as an aid to the Secretariat in preparing the records of the Committee's policy actions. The edited transcripts have not been reviewed by present or past members of the Committee.

Aside from the editing to facilitate the reader's understanding, the only deletions involve a very small amount of confidential information regarding foreign central banks, businesses, and persons that are identified or identifiable. Deleted passages are indicated by gaps in the text. All information deleted in this manner is exempt from disclosure under applicable provisions of the Freedom of Information Act.

Meeting of the Federal Open Market Committee

May 17, 1988

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D. C., on Tuesday, May 17, 1988, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman

Mr. Corrigan, Vice Chairman

Mr. Angell

Mr. Black

Mr. Forrestal

Mr. Heller

Mr. Hoskins

Mr. Johnson

Mr. Kelley

Mr. Parry

Ms. Seger

Messrs. Guffey, Keehn, Melzer, and Morris, Alternate Members of the Federal Open Market Committee

Messrs. Boehne, Boykin, and Stern, Presidents of the Federal Reserve Banks of Philadelphia, Dallas, and Minneapolis, respectively

Mr. Kohn, Secretary and Economist

Mr. Bernard, Assistant Secretary

Mr. Bradfield, General Counsel

Mr. Prell, Economist

Mr. Truman, Economist

Messrs. Beebe, Broaddus, J. Davis, R.Davis, Lindsey, Siegman, Simpson, and Slifman, Associate Economists

Mr. Sternlight, Manager for Domestic Operations, System Open Market Account

Mr. Cross, Manager for Foreign Operations, System Open Market Account

- Mr. Coyne, Assistant to the Board, Board of Governors
- Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors
- Mr. Promisel, Senior Associate Director, Division of International Finance, Board of Governors
- Mr. Keleher, Assistant to Governor Johnson, Office of Board Members, Board of Governors
- Mr. Wajid, Assistant to Governor Heller, Office of Board Members, Board of Governors
- Mr. Whitesell, Economist, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors
- Messrs. Balbach, T. Davis, Lang, Rolnick, Rosenblum, and Scheld, Senior Vice Presidents, Federal Reserve Banks of St. Louis, Kansas City, Philadelphia, Minneapolis, Dallas, and Chicago, respectively
- Mr. Fieleke and Ms. Lovett, Vice Presidents, Federal Reserve Banks of Boston and New York, respectively
- Ms. Rosenbaum, Research Officer, Federal Reserve Bank of Atlanta

Transcript of Federal Open Market Committee Meeting of May 17, 1988

[Secretary's note: No transcript exists for the first part of this meeting, which included staff reports and a discussion of the economic outlook. The texts of the staff reports are contained in the Appendix.]

CHAIRMAN GREENSPAN. We have a little problem with the Brazilian negotiations, which has diverted Jerry Corrigan for a short while. He'll be back, but he asks for us to get started in any event. I was listening rather closely to the discussion we have had, and it strikes me that there is fairly general uniformity of views as to what is happening to the economy. And I think that Governor Heller's view that what we are looking at is the elimination of the negatives as distinct from accumulation of the positives is exactly right. The one thing we have to be a little careful about is that we recognize that at some point, whenever you get a situation which is as uniformly positive as this, it turns. It's only a question of when it turns. The thing that's bothering me slightly about the outlook as I look at it--not in the negative sense but in the confirmation sense--is that, at this particular stage in the cycle, if we are running into the type of acceleration and inflationary process which is at the forefront of our concerns, I think we should now begin to get some significant inventory accumulation. We have all the forces in place for it: namely, intermediate prices beginning to move and general awareness of aggregate demand. Yet we are not seeing either; nor is there an acceleration of the types of commodity prices which tend to be reflective of imbalance in supply and demand. I'm not arguing for the commodity price explanation on the inflation side--where Governor Angell is coming from--but we have not had yet the secondary followthrough on metals prices and other prices, which have since stabilized, not as an indicator of inflation but, I think, as an indicator of the fact that this thing is not yet accumulating. My guess is it probably will, but I don't think the evidence is here as yet that it has. And the data we have on lead times, while higher, don't yet suggest the type of tightness that we see in a lot of individual industries. This is a process that I fear is going to create a fairly substantial acceleration at some time, but it isn't at the moment--or at least it hasn't. I'd be very curious--for those of you who have very specific insights on this, I would appreciate your addressing this issue very specifically, if you would, during the monetary discussion. I don't think there is any question that the next move that we have to make is on the upside. And the only question, basically, is whether we do it now or we do it before the next FOMC meeting on the basis of certain contingencies. The thing I feel a little uncomfortable with is the answer to this question: If we weren't meeting today, on this particular date, would we be moving or would we be waiting a couple of weeks or so? The reason I raise the question is that there is a market expectation which extrapolates itself from what we do. In other words, if we start to move sharply, then the expectation jumps very quickly. I'm a little concerned that if we move too fast, we can get significantly ahead of the curve, as has been said. And there is a stock market out there that I think could get pretty shabby. We could get confidence reversed.

So, where I come out at the moment is basically for either: alternative B with asymmetrical language toward tightening, with a

fairly explicit expectation that at the appropriate point we would move up; or going up \$100 million now on borrowing, also with that asymmetrical language, because I think the question really gets to an issue of whether we go up \$100 million or \$200 million before the next FOMC meeting. My own preference would be for "B" with asymmetrical language implying almost certainly moving sometime during the intermeeting period. But I don't think there are any particular dangers if we were to raise borrowing \$100 million now. Frankly, I think going \$200 million now, on top of what we have done already, is getting to the edge of being a little risky on the rapidity of the movement implicit in that and the extent to which there can be market extrapolations which occur as a consequence. Governor Johnson.

MR. JOHNSON. I'm sort of following up where I left off on the tail end of the last discussion. I'd like to throw my hat in the ring and concur with what the Chairman just said. When I came into this meeting, I guess my feeling was even a little more moderate than that; although I generally tend to be--. When I walked into the last meeting I was for no change and the discussion convinced me that we needed to move. This time, I came into the meeting basically feeling that we just had voted for a \$100 million increase in the borrowing average at the last FOMC meeting and we have made another \$100 million increase in the borrowing average, which has just occurred. And the markets have really just absorbed this move, I think. It would be unusual, and probably a little risky, to immediately hit the market again here at this meeting with another \$100 million or more, or something like alternative C, just as the market has absorbed -- and I think favorably absorbed -- our last move. So, I guess where I was prepared to come out was something like no change, with asymmetric language that provides the flexibility to move toward a tighter policy of maybe another \$100 million increase in the borrowing average during this next intermeeting period, which I think would probably be likely. The important issue would be the timing. I still tend to favor that approach, although I guess I could actually support a \$100 million move now. But I still think that it would be important to have the discretion about the timing on filtering that into the market rather than moving immediately at this meeting since we've just now absorbed a \$100 million move on borrowing. I would be strongly against going for alternative C for a couple of reasons. One, I think this would be a shock to the markets; they are not prepared to absorb that, and I think they would even wonder what they're missing that we know. I think we have better information, but I don't see the kind of evidence that supports that kind of move. Secondly, I think it would raise immediately in the markets an anticipation of an imminent discount rate move. Going up \$200 million on the borrowing from this pointtaking borrowings up to a \$600 million average, which would take the funds rate up probably into the range of 7-1/2 percent plus, maybe 7-3/4 percent--would immediately raise expectations of a move on the discount rate. That's something I would like to avoid. I'm not against ultimately moving on the discount rate if we have to, but I think the discount rate ought to be used mainly as an extra piece of ammunition, as an important symbol for an even more serious situation, if it arises. I would prefer that it not be simply a technical adjustment to what has already taken place in the markets. Then we lose the effectiveness of what we might want to do with a discount rate move later. So, I would prefer not to create those expectations of an imminent move in the market. We have leeway to do that still, but I think that we have to be very cautious.

So my preference, once again, would be no change, with asymmetric language and the understanding that there probably would be an imminent move timed sometime within this next intermeeting period. But I'd leave it up to the Chairman and the Desk to determine that. A \$100 million move now would be reasonable, but I would still prefer that the Desk remain very sensitive to how that was filtered into the markets, given the fact that they've just now absorbed a \$100 million increase in borrowings in the last few days. I don't know exactly where that puts me in terms of "A", "B", and "C"; maybe I should say that it's probably somewhere around "B". Although I guess my preference is "B" with asymmetric language, I could live with a "B" that would involve a \$100 million borrowing move, with some sensitivity on the Desk's part.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Well, Mr. Chairman, I think in about 95 percent of the meetings I've attended in the last 20 years it would have been perfectly appropriate to make a proposal for no change in the existing policy, in the light of uncertainties that existed at the time. And $ar{ t 1}$ think that's one reason why we've always tended to lag. particularly concerned, given our present structure of meetings. went to this eight-meeting system back at the time when we were supposedly controlling M1 and, therefore, there was less need for frequent consultation. I think that ought to be reconsidered if we are really on an interest rate control system, even though there was a lot of sentiment against it expressed at the last meeting. To have our next meeting at the end of June involves a long intermeeting interval in this kind of situation. That doesn't mean that I disagree with your recommendation that we sort of hedge our position here--go half way, with the idea that we'll look at the incoming data in the next couple of weeks, and perhaps decide to go whole hog. suggest that the proper time would be to have a meeting after the new orders figures are out. If my thesis is right -- that we have a head of steam building in the manufacturing sector-then that ought to be reflected in pretty strong orders figures. And if they're not strong, that would be a signal for--

CHAIRMAN GREENSPAN. We should pick that up in the purchasing managers' survey; it's probably more sensitive than most published figures.

MR. MORRIS. That's right; if you wanted to wait two weeks you'd pick that up.

CHAIRMAN GREENSPAN. You get the lead times, and you get a qualitative sense of the issue you are raising.

MR. MORRIS. In terms of approaching it this way and hedging our position--moving half way and reconsidering in a couple of weeks--that makes good sense to me. But, if we weren't going to reconsider, I would prefer to go whole hog right now.

MR. ANGELL. Does whole hog mean "C" or--

MR. MORRIS. Whole hog means "C", yes.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, you asked us to comment specifically about inventories. I think that there probably is some indication of accumulated inventories that are imported goods, and that's in response to higher prices. With regard to other goods, my recollection of that period in the late '70s when that occurred is that that is a bit of a lagging factor. What usually happens is that we get some pickup in the price indexes and that begins to fuel expectations; and we don't get the really rapid accumulation of inventories until somewhat later. And if that, in fact, is correct, I think maybe waiting for that as an indicator might be a little dangerous.

CHAIRMAN GREENSPAN. But this is the later; we are there now. We have already had this. Of course, we're in May and about to get into June. We just haven't seen what has been happening in the data. Historically, it would be happening just about now.

MR. PARRY. Is that right?

CHAIRMAN GREENSPAN. Yes.

MR. PARRY. Well, I thought there was more of a delay.

CHAIRMAN GREENSPAN. I don't think so.

MR. PARRY. In any case, as I see the developments, particularly the ones we've mentioned -- unemployment, capacity utilization, M2, the positioning in the aggregates -- it seems to me that there is a very strong case to support Bluebook alternative C. In fact, I can't imagine a more convincing case being put before us than the one that was put before us by the staff. There was general agreement with the staff's forecast; some questioning about it. But it seems to me that it is explicit in the staff's forecast that if we delay in taking action, we're going to pay a price later -- conceivably, based upon what we know, in terms of having to move even more aggressively. I know it has been mentioned that we've moved twice recently. Those two moves of 1/4 of a percentage point just don't do much. And I remember earlier times when, to get any significant impacts on the economy, one would have had to move a lot more than a 1/4 of a point. So, my clear recommendation would be Bluebook alternative C. I could see as something of a compromise that we move borrowings up maybe a \$100 million now. But I would hope that we would have specific plans to talk or reconvene in a couple of weeks to see what the intervening two weeks or so bring in terms of data, because I think that, unless they show weakness, we should then move again.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. With regard to policy, I think the timing question is a very difficult one, as you suggested. The markets-certainly the stock market and maybe the bond market as well--probably are vulnerable if we move too far too fast. On the other hand, they're vulnerable if we delay too long. I don't know what the precise, perfect timing for this kind of action is. What I think about is our longer-term goal and the point I tried to make earlier: that whatever is likely to happen on the wage and price side, it doesn't seem to me that there's going to be any deceleration next year

unless we act. I think it is time for some further action, and I would be in favor of your second alternative, which is to go \$100 million now, with an asymmetric directive, and expect that that probably will not be a big shock to the markets. In fact, depending on circumstances, it could be welcomed. And then what happens after that depends on the data that come in.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Well, Mr. Chairman, everything we've talked about this morning--the forecast, the employment and unemployment numbers, and the potential wage and price pressures--clearly and pretty uniformly indicates, I think, that the risk is on the upside and that we are worried about inflation. But, I don't interpret the last two actions we took recently as being unsubstantial. So, my preference would be to wait before we take any further action and let those two actions work their way through the economy. After all, the latest action was just a little while ago. Now, if we hadn't taken those actions, I'd be of a different mind. But, at the moment, my strong preference is to wait--perhaps not very long--maybe three or four weeks, or something like that. So, I would like to stay where we are with \$400 million in borrowing, but with an asymmetrical directive. I would be prepared to support an alternative which would move it up \$100 million, to \$500 million, with a symmetrical directive. But I would have a real problem with moving all the way to alternative C at this point.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I'd like to start by sort of recapping what I see in worldwide inflation rates. I think we are looking at a situation where, for one reason or another, the inflation rates of two of the major economies out there are moving up toward ours, instead of ours moving down toward theirs. And that seems to me to be a real loss in ground. There are reasons for that; they have exceeded their monetary growth rate targets, partly in defense of the dollar. monetary growth rates seem to be giving the kind of impetus to spending in those economies that we would expect. And I don't see that going away any time very soon. So, worldwide, we have a potential trend that is discouraging. In terms of our own inflation rate -- just to reiterate what I said earlier -- we have been stalled at a rate that I think is too high for most of us, at least as stated in terms of our objective, which is price stability. Even if the staff forecast is in error, in the sense that it's too strong on the economy, it seems to me we're still faced with the prospect of inflation staying at current levels or rising. And if our objective is price stability, then we ought to begin to pursue that objective aggressively.

With respect to movements, and the size of movements in policy actions, I think there are several issues that surround this discussion. One is the credibility of policy. Policy credibility means that markets believe you're going to do what you say you'll do. I find it difficult to believe that markets believe our rhetoric about price stability when the long bond rate is over 9 percent. I don't know what happened to it this morning, but I suspect that if I were advising people in the market, as I did a year or so ago, I'd say that the economy looks stronger than I thought, and that we would see a

rise in inflation and, therefore, a rise in interest rates. And I would expect the bond market to be selling off. Back on the credibility issue: if we move now, and convincingly, it seems to me that we will have a peak in interest rates that is lower than if we wait and go forward in incremental steps. A second point about credibility is the issue of confusion in the public and, perhaps, in our own minds. If we react with small moves to noisy data that come out monthly, then I think the public doesn't understand fully what we're trying to do. More importantly, I think it convinces us that we have more ability to control economic activity than we really do. I think monetary policy is a long-run policy, not a short-run policy. So, I think the markets are not as unsure about us. We have gained some credibility; and I think we ought to retain that credibility. And last, I guess I ought to say, given the strength of my statement, that I prefer alternative D. I think I'll end there.

CHAIRMAN GREENSPAN. I'll record you as "C" because I don't have [unintelligible] on the other end! President Boehne.

MR. BOEHNE. I think we have to balance the notion of where we have to go, which I think is some tightening, without being disruptive to the markets. The best balancing, from my point of view, would be to raise borrowing \$100 million now. When I say now, I don't mean tomorrow; I would think that we would have to give the Desk some discretion to work it in over the next week or 10 days. I would have an asymmetrical directive that would stack the deck some in the direction of tightening, but still wait to see incoming information. I guess that puts me at kind of "B", "C+", with an asymmetric directive.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I'd like to get back to the middle of the target range for the monetary aggregates--not do it instantly, but gradually. I fully agree with the Chairman's views: alternative B with asymmetric language and \$100 million on borrowing.

CHAIRMAN GREENSPAN. Do you mean \$100 million at some point between--

MR. HELLER. At some point--you feed it in slowly.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, I too would join those who have a concern about upward interest rate movement. However, it seems to me that the risk is on the upside, and there's enough room to take another cut at some restraint without disrupting the markets. As a result, I would like to associate with those who would opt for a B-C alternative, which is the \$500 million on borrowing; but I'd also include in that asymmetrical language toward further restraint. When I focus on moving from the \$400 million to \$500 million, I would just note that seasonal credit has taken its normal track and has increased rather dramatically since our last meeting from something less than \$100 million to--I don't know what it was at the close of this period, but at times it was over \$200 million. If you have a \$400 million objective for borrowing, and over \$200 million of that is seasonal, you really are depending upon how you view the seasonal--whether it's

sensitive to interest rate levels or not. I really believe that moving to \$500 million rather promptly is not a major move, given the makeup of the borrowing level of \$500 million. As a result, going to \$500 million then, with asymmetrical language, would permit us to move on toward the C alternative depending upon what incoming information we may have in two weeks. That would be my prescription.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I think the question that was asked for those who want to wait is: What are you waiting to see? I think it is a good question. I'm very sympathetic with the notion that we can give misleading signals in regard to what it is that it appears we are focusing on when we make the move. It does seem to me that if the staff forecast is accurate, at some point in time the discount rate change would be a part of such a move. And I point out that if that were to take place, of course, it could take place at any point in time between Open Market Committee meetings. If there are factors that would make us think that we would need that much of a change, it seems to me we ought not rule that out. So, I don't see that today is necessarily the time to move. But I would have a strong preference as to what kind of signals we use. I happen to like something in alternative C very, very well. And what I like in alternative C are the M2 growth paths. Frankly, I would like for us to look at those very carefully, and, if I thought we could wait, do nothing now in regard to a borrowing target move. That would be acceptable to me because I don't think we know at this stage what has happened on the money growth that would be anticipated from the moves we have made. Certainly, April was a month we knew wasn't going to give us very clear readings on the monetary aggregates; May looks like it might be consistent with "C"; and if June doesn't follow that path, frankly, I'd like to have that be the factor that would cause us to make a I say that in keeping with my view that we will be able to achieve our movement to price level stability if we do not allow the exchange value of the dollar to fall further. I believe that an alternative C growth path of the monetary aggregates would be consistent with a stable dollar in the short-term horizon, and I'd like to have that kind of restraint. But I certainly feel comfortable in having the Chairman-he has shown already that he is responsive to these forces and that we could make this move as we see some more alternatives. So, it's okay with me to have a strong tilt in the directive and to have no change today in the borrowing target, provided there is some assurance that we will be ready to act if those monetary growth rates do not return to what I thought was the very good path that we had in 1987. Hindsight says that wasn't too bad.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, I feel a little ambivalent, certainly not regarding the direction, but regarding the question of timing. We have talked about that a lot. Ed Boehne phrased it much the way I would. I would not move on the borrowing today, because I think it would be pretty quick after the last move and might perhaps signal a little more to the markets than we would intend. And we want to do this in an orderly way. So, I would bring the level up by \$100 million as soon as we think the markets can accommodate that; I don't know whether that's a week or two weeks, something like that. Certainly, I'd be in favor of asymmetric language with an upward bias

in the policy directive. And I think it's not only possible, but very likely, that we will move on the second \$100 million before the next meeting of the Committee. Whether we do that at a conference call or leave that entirely to you, I'm indifferent.

CHAIRMAN GREENSPAN. Governor Seger.

 $\,$ MS. SEGER. I'm in favor of "B", including the idea of adding \$100 million to the borrowing target eventually, for many of the reasons that the Chairman mentioned. The main reason is, again, that we have had these two tightening moves in very recent weeks and I'm not sure that the markets have fully digested those moves. I'd be very surprised if the real economy has taken them into account or if the monetary aggregates have begun to reflect them. Also, as I mentioned before, I think we ought to pay some attention to the stock market. I think there is a lot of nervousness still there, at least among a lot of institutions. In many cases, institutions and small investors have taken a walk. I haven't heard anyone mention the $\,$ thrift industry, but I think that that's a disaster area, and something we have to pay attention to. Bob Boykin, I'm sure, can speak to that, as can a number of us; and too much tightening too soon, I think, would make it a greater disaster. I can't imagine that the LDC debt situation would improve dramatically if we tighten too much. Also, as I read that table on the growth of the monetary aggregates, it seems to me that those aggregates are expected to slow whether we go with "B" or "C". And I still think that some inventory correction is in the cards. I don't know when it will be--I'm not that smart; but I think there is some excess there that is going to be worked off. In fact, when interest rates get higher, it just gives business people stronger incentive to run with less inventory. I could live with the asymmetric language as well. I think that summarizes it.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I think the staff has made an excellent case in its forecast for an early move. It's true we have made a couple of moves recently, and I think they have been timely and very appropriate. But I remember so many times sitting around this table when this was the apparent stage of a business cycle where traditionally we have made our largest mistakes. So I think we ought to move now. I think you've given us wise counsel in suggesting we hold that \$100 million increase in the borrowed reserve figure; and I would buy that, with an asymmetric directive. I'd like to get rid of that language about the unusual flexibility. I think that's unduly fuzzy and just confuses people. And I'd like to keep open that option that we would go the other \$100 million if, after two or three weeks, it looks as if we need to. In short, "B".

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, when Bob Forrestal spoke a few minutes ago I wish that I had been the next one on the list and I could have simply said "me too." I think that it's a time to wait, given the evidence to date and the two recent moves, which I agree were not insignificant. I would be in favor of "B" and keeping the same borrowing for now, with asymmetrical language. But, as Bob

suggested, I'd be comfortable with going an additional \$100 million now with symmetrical language.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. I agree with the position that has been stated by you, Mr. Chairman, and others. I'm a "B-", "C+", however you characterize it, with the \$100 million increase in borrowing. I guess I would be inclined to move sooner rather than later on the \$100 million. If I had the real courage of my convictions, as Lee Hoskins does, I would really like to line up with him. I guess I just don't have that much courage, given the situation I have down there in the Southwest. But, I think he makes a very, very good point that policy, and what it is that we can do, has to be viewed in the longer run. And I think when we temporize and rationalize some of the short-run problems we think would result from taking actions, that's not really communicated and tends to compound the problems over the longer range.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Well, my instincts probably are the same, but I think that for financial market reasons, if nothing else, I'd be willing to sneak up on it. To me, that would mean do the \$100 million now with asymmetric language, although I could live with an arrangement in which you and Peter have some flexibility in terms of edging that \$100 million in. But, certainly, I feel very strongly that we should get that first \$100 million in promptly. I think that the two changes in policy that have been made in the last several weeks or so clearly have been viewed favorably by the markets as an indication that we are indeed prepared to respond to these conditions. But I agree with Bob Parry that, insofar as the economy is concerned, I doubt that they've done much of anything. I think that Don Kohn made that point in a way, earlier on, when he pointed out that nominal and real interest rates -- even after those moves -- are precious little different from what they were a year ago. And in the intervening year, the economy has grown at a rate that simply won't work prospectively. I also have a nagging fear here--I don't know what the staff's views on this are-that because of these highly mobile money and capital markets on a worldwide basis, that it may take a higher level of interest rates to achieve a given degree of restraint in the real world. And if that were the case, our problems that lie ahead, especially in the context of Governor Seger's comments about thrifts and a lot of other things, would be all the more difficult and all the more damaging. It is precisely for that reason that I feel so strongly that moving now is the right thing to do. I agree with comments made by Governor Johnson, I think before the coffee break, and by Lee Hoskins a few minutes ago: that we've got to avoid fine tuning here; the broad thrust of developments over the next six or seven quarters is what we have to keep in mind. And that, too, says to me that we ought to move now. I also agree with Governor Johnson on the discount rate question. In the situation that we have right now--where we're on the upside of the cycle and where we don't have to worry about frictional levels of borrowings -- I don't see that there is the same kind of prejudice for a discount rate [increase] that there was on the downside, where we run into that frictional borrowings problem. So, I don't see that there is any presumption whatsoever, at least in my judgment, that if we moved--perhaps even as far as a fullblown "C"--that that would create a strong bias toward having to move

the discount rate. Indeed, at the phase of things that we're in, like Governor Johnson, I personally--not that I have a final say on the discount rate--would try to keep our powder dry on the discount rate and work through the market as much as possible. I think that does two things: One, it minimizes the dangers of market disruptions; and secondly, it leaves us in a stronger position if something really adverse develops in the next month or two, or whatever. To summarize, Mr. Chairman, I would do the \$100 million now, with an asymmetric directive. That's it.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I've followed the moves that have been taken, but my sense is that, in effect, they are rather small following moves. I think at some point we're going to have to step out in front of this situation if everything we've heard today is correct. And that's going to take something more on the order of alternative C. The timing issue has been talked about. I would guess--and again, Mr. Chairman, I think you did the right thing by moving within your latitude--that if you had the benefit of all this discussion you might have moved it a full 50 basis points, and we wouldn't get into two increments of 25 basis points. Because of this view that I think we have to get in front and make a strong statement, I would favor "C"; but I could certainly accept a "B" with asymmetrical language--\$100 million now and \$100 million later.

CHAIRMAN GREENSPAN. As I tabulate the results, everyone here believes, as best I can judge, that the next moves are higher. The only thing that basically differs here is whether we move now or move in a short period. What I would like to suggest is that, if I've written down correctly what I heard from everybody, there seems to be a consensus for alternative B and asymmetrical language, with a fairly strong willingness--desire, if I can put it that way--to give instructions to the Chairman and the Desk to move before the next I would interpret that to mean that, unless we see events which clearly are contrary to the general consensus of the outlook as one hears it today, it's almost an automatic increase. There is a strong, and I think convincing, case that is being made that we should not, under any conditions, allow ourselves to get behind the power curve on this question. And I would say further -- in line with the issue Frank raised about the frequency of meetings -- that should anything of moment arise that suggests the need to have a telephone meeting, I think we should. That would substitute for having to come to grips with this rescheduling question. I don't think there's any doubt that we are in a very sensitive policy period; and I think that close discussion and judgments are probably going to be needed at intervals shorter than our scheduled FOMC meetings. So, what I'd like to suggest, and I hope that Norm would find the appropriate language-I'm sorry, there's one thing I did forget. Unfortunately, I only got from President Black his judgment about that sentence; we did not get any other appraisals on leaving that sentence in or dropping it out. I think we'll go around on that question before we take our vote. Normand, why don't you just --

MR. BERNARD.
Vice Chairman Corrigan Out

MR. JOHNSON. Before we do, [please read the sentence].

MR. BERNARD. The Committee agrees that the current more normal approach to open market operations remains appropriate; still sensitive conditions in financial markets and uncertainties in the economic outlook may continue to call for some flexibility in operations.

MR. HOSKINS. What about the 5 to 9 percent or 4 to 8 percent? Do you want to do that at the same time or not?

CHAIRMAN GREENSPAN. Well, no. In a certain sense--

 $\ensuremath{\mathsf{MR}}\xspace$. ANGELL. It seems to me that 5 to 9 percent would be more appropriate.

CHAIRMAN GREENSPAN. 5 to 9 percent is clearly--

MR. HOSKINS. I just wanted to bring it up and make sure we

CHAIRMAN GREENSPAN. Yes, but 5 to 9 percent is in both "B" and "C"; so it's automatic.

MR. BERNARD.

Governor Angell Out President Forrestal Out Governor Heller Out President Hoskins Out Governor Johnson T.n Governor Kelley Out President Parry Out Governor Seger In

CHAIRMAN GREENSPAN. It's clearly [the preference of] the majority for it to be out. Anyhow, what I'd like to do is have a vote. Why don't you--

MR. BERNARD. Do you want me to try to read this?

CHAIRMAN GREENSPAN. I can't; I've never been able to read his writing so--

MR. BERNARD. I'll give it a try. Unless maybe it would be better--

MR. KOHN. Or do you want me to? Sometimes I can't read my writing either. By the way, Mr. Chairman, I think it could be handled, if you wanted to, by just having the maintain and then the tilt in the sentence. But it would be understood, and made clear in the policy record, that the Committee expected to move. But if you wanted to state something more clearly in the operational paragraph, my suggestion is as follows: Taking account of conditions in financial markets, the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates, the Committee expected that a slight increase in the degree of pressure on reserve positions would be appropriate in the weeks ahead. Depending on

further developments in these factors, somewhat greater reserve restraint would or slightly lesser reserve restraint might-and then you'd have to be clear with the end of that tilt-be acceptable later in the intermeeting period.

CHAIRMAN GREENSPAN. I'm sorry, I think you're putting the--

MR. KOHN. So, the first sentence has maintain in it; and then, taking out the sentence in brackets, the second sentence says taking account of all those things the Committee expects that a slight increase in the degree of pressure on reserve positions will be appropriate in the weeks ahead. So, I presume that that means if those things don't come in the way we expect, it wouldn't be [appropriate].

CHAIRMAN GREENSPAN. Yes. In other words, it's a fairly strong asymmetrical statement?

MR. KOHN. Well, no; it's a statement actually stronger than that. It says we expect that a firmer--

MR. HELLER. It's drifting up.

CHAIRMAN GREENSPAN. The timing.

MR. STERNLIGHT. And the maintain would only be initially.

MR. KOHN. Right; it says "in the implementation of policy for the immediate future the Committee seeks to maintain the degree of pressure on reserve positions."

MR. BLACK. Initially; maintain initially.

MR. KOHN. Initially, okay. And then, taking account of all these things, the Committee expects that a slight increase in the degree of pressure on reserve positions will be appropriate in the weeks ahead.

CHAIRMAN GREENSPAN. Not will be, would be.

MR. KOHN. Would be, okay. I had would originally.

CHAIRMAN GREENSPAN. Because there is, in effect, a contingency here.

MR. JOHNSON. We could be surprised. The subjunctive is right; that's correct.

MR. KOHN. And then I have depending on further developments in these factors--[that's not] the right word, I'll think of another word--somewhat greater reserve restraint would or slightly lesser reserve restraint might also be acceptable later in the intermeeting period.

MR. ANGELL. So you have a preponderance of a move and a tilt also?

MR. KOHN. A strong supposition of a move unless things were surprising, and then the possibility of [a further move], but there's a tilt in the possibility.

CHAIRMAN GREENSPAN. Anybody object strongly to that language?

VICE CHAIRMAN CORRIGAN. I have trouble with it.

CHAIRMAN GREENSPAN. How would you rephrase it?

VICE CHAIRMAN CORRIGAN. I would have the first sentence say the Committee seeks to increase slightly the degree of pressure on reserves.

CHAIRMAN GREENSPAN. But that's not what the majority is.

MR. ANGELL. Majority.

VICE CHAIRMAN CORRIGAN. I understand that, but you asked me what I would prefer. That's what I prefer.

CHAIRMAN GREENSPAN. Oh, okay. I'm asking the question of whether I've captured the sense of the majority.

MR. HELLER. Yes, that's good.

MR. JOHNSON. It did mine.

MR. ANGELL. It seems to me that that's a very appropriate response. And as I understand it then, that almost means that we would expect maybe a telephone conference call if we don't do it.

CHAIRMAN GREENSPAN. No, I would not say expect; I would say if we don't, that would require one.

MR. ANGELL. There would be a telephone conference.

CHAIRMAN GREENSPAN. It requires a telephone conference.

MR. BLACK. Mr. Chairman, could I ask for some estimate of the length of time before we move?

CHAIRMAN GREENSPAN. Two weeks.

MR. BLACK. At the most?

CHAIRMAN GREENSPAN. Yes.

MR. BOEHNE. Mr. Chairman, I guess it all depends on how one listens to things, but I had the sense that there was a majority of people who wanted some tightening, say, in the next couple of weeks. And it would seem to me one way to do that would be to say in the implementation of policy etc., the Committee seeks to increase slightly the degree of pressure on reserve positions in the immediate weeks ahead.

MR. ANGELL. But, Ed, the count was four people who favored an immediate tightening.

MR. BOEHNE. But it's not immediate; it's spread over the next couple of weeks.

MR. ANGELL. No, no. I'm just talking about a count of the voting members.

MR. BOEHNE. Oh.

MR. ANGELL. There were four members.

MR. BOEHNE. But I think if you counted the people who wanted a tightening immediately, plus those who are willing to have some flexibility over the next week or two, you would have a majority. And, therefore, if you are a little vague about whether you do it right away or within the next--

MR. HELLER. Are you talking about the Committee or the whole group?

CHAIRMAN GREENSPAN. He's talking about all the participants.

MR. BOEHNE. Well, I didn't keep that accurate a score.

CHAIRMAN GREENSPAN. I think you're correct on the total Committee [participants].

MR. BOEHNE. I see.

CHAIRMAN GREENSPAN. I don't think it comes out that way [for the voting members].

MR. BOEHNE. All right.

MR. KELLEY. Six; and six are voters.

CHAIRMAN GREENSPAN. Unless I'm mistaken.

 $\,$ MR. HOSKINS. Can we poll for a \$100 million over the next two weeks and then--

MR. ANGELL. Sure.

MR. HOSKINS. Of the voting members?

MR. JOHNSON. We can certainly clarify that.

CHAIRMAN GREENSPAN. Yes. We might as well because we are very explicit on exactly what the difference is. We can do that. So, let me tell you what the language is and what the actual difference is. The question basically is the issue of \$100 million now or \$100 million in, say, two weeks, unless some event occurs. That's what the difference basically is in this particular group. Would that be the view?

MR. BLACK. That's right.

CHAIRMAN GREENSPAN. In either event, there is asymmetric language in the directive over and above this. Okay, why don't you poll on that very specific question.

MR. BERNARD. Okay. \$100 million now versus \$100 million in two weeks.

Chairman Greenspan Two weeks.

Vice Chairman Corrigan Now, but I could live with two

weeks.

Governor Angell Two weeks.

President Black Now, but I can also live with

two weeks.

President Forrestal Two weeks. Governor Heller Two weeks.

President Hoskins Now, but \$100 million is not

enough.

MR. JOHNSON. \$100 million is not enough?

MR. HELLER. Two weeks ago.

MR. BLACK. You haven't ruled out the \$200 million, have you?

MR. ANGELL. No, no.

CHAIRMAN GREENSPAN. No, we haven't, because we don't have enough votes for that to have--

MR. BLACK. No, but I mean over time, after you've moved the \$100 million, if these contingencies--

CHAIRMAN GREENSPAN. Well, we still have asymmetric language.

MR. ANGELL. That's right, so it could be \$100 million now and \$100 million [more] before the next meeting.

MR. JOHNSON. It's possible to have \$200 million within the intermeeting period.

MR. BLACK. That's the point I was making.

CHAIRMAN GREENSPAN. Yes; that's correct.

MR. BERNARD.

Governor Johnson Two weeks. Governor Kelley Two weeks.

President Parry Now.

Governor Seger Two weeks.

CHAIRMAN GREENSPAN. That's the same vote that I got before. So, unless I'm mistaken, that is captured by Don Kohn's language.

MR. BOEHNE. Oh, it is captured; it just makes it a little stronger. It puts it right up front that you intend to tighten within two weeks.

MR. JOHNSON. But that's with [unintelligible] any contingency. And we want to keep in some contingency; it's not very likely, but there is a contingency.

CHAIRMAN GREENSPAN. You know, there's a difference. I think we're pretty clear on what the consensus is. That language is not in the public domain, in any event, for six weeks; and I don't think that there are ambiguities on what the instructions to the Desk and Chairman are in this respect. Why don't you read the directive as we now have it.

MR. BERNARD. Mr. Kohn just suggested one additional word at the start: In the initial implementation of policy, the Committee seeks to maintain the existing degree of pressure on reserve positions. Taking account of conditions in financial markets, the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates, the Committee expects that a slight increase in the degree of pressure on reserve positions would be appropriate in the weeks ahead. Depending on further developments in these factors somewhat greater reserve restraint would be acceptable or slightly lesser reserve restraint might be acceptable in the--

MR. KOHN. Thereafter. Mike Prell just suggested--

MR. BERNARD. Later weeks of the period?

MR. KOHN. Yes, I said later in the intermeeting period.

 $\,$ MR. BERNARD. Later in the intermeeting period. And then I guess we need some numbers on the monetary aggregates. The contemplated reserve conditions are expected to be consistent with growth in M2 and M3 over the period from March through June at annual rates of--

MR. ANGELL. Let's take the "C" numbers.

MR. JOHNSON. There's not enough difference between any of them to matter much.

MR. ANGELL. I know, but that's--

CHAIRMAN GREENSPAN. 6 to 7 is right; that stays in.

MR. ANGELL. March to June?

 $\,$ MR. BERNARD. March through June at annual rates of about 6 to 7 percent.

MR. ANGELL. Why do we use March to June rather than May to June?

VICE CHAIRMAN CORRIGAN. You don't know what May is yet.

MR. BERNARD. That's the usual way it has been done.

MR. ANGELL. Well, I know; but it seems to me that what you already have behind you, you can't alter. I thought maybe--

CHAIRMAN GREENSPAN. That period.

MR. ANGELL. How about May to July?

CHAIRMAN GREENSPAN. You know, really it shouldn't--

 $\ensuremath{\mathsf{MR}}\xspace$. ANGELL. Really. Because otherwise you convey a mistaken impression.

CHAIRMAN GREENSPAN. Don, is there any reason why?

MR. ANGELL. Why not May to July?

MR. KOHN. May to July?

MR. ANGELL. Yes.

MR. KOHN. Well, generally we focus on a quarter at a time. We'll be meeting again at the end of June, so I'm not clear why you'd want to specify—

MR. ANGELL. I know. But what we do in June --

MR. KOHN. The July growth rate won't--

MR. ANGELL. But what we do in June can't affect June's growth rate or even July's growth rate.

MR. KELLEY. Just say the intermeeting period.

MR. KOHN. But there's very little information that will come in between now and then that will tell us very much about July's movement.

MR. ANGELL. So I'd prefer to say 4 to 6 percent from May to July. That would give some indication here of what we're--

MR. KOHN. Do you mean April to July?

MR. PRELL. Do you mean April to July? Because we don't know--

MR. ANGELL. Yes, April. Right; that would be a quarter.

CHAIRMAN GREENSPAN. Can I suggest that we make that change at the next FOMC meeting, because you're actually raising more difficult questions. Let's stay with what we have; let's do 6 to 7 percent March to June, but resurrect this issue because I think Governor Angell is raising a quite legitimate question.

MR. BERNARD. And the funds range?

MR. BLACK. Mr. Chairman? I have one question: Did we mean to have maintain initially? We talked about that and I thought we sort of--

MR. JOHNSON. Yes, I thought it was. The way that statement reads there's a lack of contingency in there, but I may have missed something.

MR. KOHN. The contingency came after "the Committee"; there was an "initially" in the first sentence, Bob, and then--

MR. BLACK. It was; but it wasn't when Norm read it.

MR. KOHN. Yes.

MR. JOHNSON. Yes, he read "initially" the last time.

MR. BLACK. He did?

MR. JOHNSON. Yes.

MR. BLACK. Well, I missed that one, too. I'm sorry, Norm.

MR. BERNARD. Yes, it would start "in the initial implementation of policy".

MR. BLACK. Oh! You had it in a different place; that's why I couldn't find it. I'm sorry--I was looking for it down near the "maintain".

MR. KOHN. Governor Johnson, there is a contingency toward the end; it relates to the remainder of the intermeeting period.

MR. JOHNSON. Well, okay.

CHAIRMAN GREENSPAN. We can vote.

MR. BERNARD.

Chairman Greenspan Yes Vice Chairman Corrigan Yes Governor Angell Yes President Black Yes President Forrestal Yes Governor Heller Yes President Hoskins No Governor Johnson Yes Governor Kelley Yes President Parry No Governor Seger Yes

CHAIRMAN GREENSPAN. Anybody have any objections to discussing the monetary base over sandwiches?

[Short recess]

MR. MELZER. [Unintelligible] because I think it tends to support [the view] that there is a desirability of having such a constraint. Now, one argument you can make is one that was in the follow-up memo I sent around, and I think we've just witnessed it in our discussion. And that is the difficulty of coming to grips with, in effect, targeting interest rates; it is difficult to deal with that process without some tool that enables you to take a longer-term view,

which I think the constraint does. Don, having complimented you on your memo, let me just say-I'm not going to criticize-but I can't really say any better than it was said in that memo why I think this type of constraint would be desirable. This is on page 10: "Generally, periods of rapid growth in the base in recent years have been followed, with a lag, by a tightening of monetary policy. In some cases (1983, 1986) these have been periods in which the Federal Reserve had been easing. Greater attention to the base might have tempered the degree to which policy was previously eased, reducing the need for subsequent tightening, and damping the cyclical variations in interest rates, albeit at the expense of somewhat greater short-term interest rate volatility." I think that in a nut shell makes the case right there. Again, I'd say that just the short experience I've had here on the Committee would tend to support that.

With respect to the question of targets versus a constraint, I personally would be much less inclined to adopt a base target. Now, I think you could say that the base might have an advantage in that it is more directly controllable than any of the other aggregates that we presently target. Its relationship to our ultimate goals of policy is not better. And I guess I fear, and it's implied in Don's memo, that if we just decide here today, let's say, to set target ranges for the base instead of M1, we're actually going to hurt ourselves in the process. If it is treated as the other aggregates have been--in effect, that we set the target but then we're willing to violate it--I think that could do more harm than good, frankly, to the credibility of this process. So, I'm not saying there aren't any circumstances under which I would ever favor a base target, but I don't think this is the right time. I don't think the econometric analysis could support that being the desirable thing to do.

With respect to the constraint itself, there's a suggestion of a four-quarter moving average, which troubles me in this sense: I think it basically defeats the purpose of what the constraint does, which is to put some real limits on how fast or slowly the base can grow in any one quarter. Technically, with the 5 to 9 percent that has been used for demonstration purposes, if you will, with a fourquarter moving average you could have base growth rates of 20 percent, 20 percent, -2 percent, -2 percent, and back to 20 percent. In effect, you could have the same kind of volatility and still meet the constraint and, I think, suffer the adverse economic consequences that that kind of volatility in base growth occasions. Also, I think this four-quarter moving average would have some of the same potential problems as an annual target--namely, that if the base grew very slowly for two or three quarters, or very rapidly for two or three quarters, and you were approaching the end of the four-quarter moving average period, you'd be faced with a decision of whether to adjust the growth abruptly in the base to stay within this constraint, or to ignore it. I think our experience has shown us that, typically, that's a hard decision to make. And I think that, too, could undermine the credibility of this [procedure].

I guess there are two points I'd like to make in connection with this. When I suggest this 5 to 9 percent range, or whatever, I'm not saying that it should never be ignored. I think, in practice, it probably would be observed most of the time. But there could be situations where we choose to ignore it and, as has been pointed out, those situations very likely would be associated with the behavior of

currency. But that's something we can observe. Our analysis on currency has indicated that where there have been aberrations in the growth rate, they have tended to be reversed within a quarter or two. But if we had a situation like that, I think it would be related to broad economic circumstances that we would generally understand and could explain; and we could very easily justify violating the constraint. But, in general, I don't think it would be violated. final point I would like to make is that I agree with the work that Don and the others did in terms of the nonborrowed base--that from the controllability point of view it would have an advantage. I guess what I'm not so sure about is whether we lose something in a conceptual sense, because the base is something people are familiar with. Do we lose something in the conceptual sense to go to a more esoteric concept like a nonborrowed base? I could live with either one, but I prefer the base and not the nonborrowed base; I'd live with the short-term controllability problem as, over time, I think it can be controlled. I think that's all I would care to say right now, Mr. Chairman.

CHAIRMAN GREENSPAN. Mr. Kohn.

MR. KOHN. Thank you, Mr. Chairman. [Statement--see Appendix.]

MR. HOSKINS. Well, I think the proposal deserves serious consideration. I'm not wedded to the base itself. Given the objections that some of the Board's staff have raised, I think the nonborrowed base would do the same thing that we're trying to I think what we're trying to accomplish with this kind of a proposal is to tie our hands, to some extent; and in doing so, I think we would give some assurance to the markets that, in fact, we will react in a certain way over time. Another thing we need to address is that we would also have to make it public -- if it's to work appropriately -- to get the markets to do our work for us, as the market did when we had a nonborrowed reserve targeting procedure. If we use the quarterly average approach, and it looked like the month or two If we used coming in were going to push the quarter above that constraint, the market would perceive that and begin to push interest rates up itself. So, [this approach] would allow us to curb the base growth. we'd have an override of the FOMC, if conditions warranted. We'd have to take an explicit vote and that has an advantage too. If you wanted to make that tougher, you could require a two-thirds majority, or something of that nature, so that it would be a real constraint on us, a more difficult constraint.

CHAIRMAN GREENSPAN. If you can get a majority for the whole procedure.

MR. HOSKINS. I would suggest, if we have some agreement on it, that we at least look at doing a monitoring of it, if not a range. I know Tom didn't want to put a cone out there, but the market will very quickly draw parallel lines and also draw a cone. You have parallel lines, which is basically what you're projecting as a range, and people will start in the middle of those parallel lines and begin to figure when the base is going to bump against either the ceiling or the bottom end. So, I don't think it is going to be a real issue, whether we put a range in there or not. I think the markets are going to interpret it correctly as a governor, if we announce it as such and

if we react that way. So, I think there is some reason for us to consider this, and maybe even set up the monitoring approach as early as the next Humphrey-Hawkins [meeting].

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Well, I have a contrary opinion. I think what we have learned in our adventures with M1 is that, if a monetary aggregate is not predictably related to nominal GNP, it is not a useful indicator for monetary policy. We went through a number of years with M1 in which the Committee had to set aside M1 as a target, then later reinstate it, hoping that it would again become a predictable indicator of nominal GNP. And then we finally removed it entirely. I think if you look at Tom's chart at the back of his memo, it's pretty clear to me that, if we had had a monetary base target in 1980, we would have had to get rid of the monetary base for the precise reasons we had to get rid of M1 as a target. If you look at the growth rate of the monetary base in the fourth quarter of 1982 and the first quarter of 1983, you'll see that it was running around 12 percent--3 percentage points above the top of the limit. Given the fact that the ratio of currency to reserves is about 2-1/2 to 1, it would have taken an extremely tight monetary policy to push that rate of growth back within the 9 percent ceiling. And I would point out that the fourth quarter of 1982 was the bottom of the worst recession we've had in this country since the 1930s. It's inconceivable to me that this FOMC, or any other FOMC, would have thought it sensible to have followed a much more restrictive policy in the fourth quarter of 1982 and the first quarter of 1983. We already had classically high interest rates. I don't know what federal funds rate would have been required to push the monetary base growth back to 9 percent, but it obviously would have been a lot higher than 20 percent, because 20 percent was not doing it.

MR. MELZER. Frank, to some extent, though, there would have been reaction to the very slow growth of the base that took place all the way through 1981 and a good deal of 1982.

MR. MORRIS. All right; but your system would require us to react at this particular time.

MR. MELZER. Well, I know; but you can't just pick up on some--

MR. KOHN. If [there had been] some reaction in 1981, you might not have had the reaction--

MR. MELZER. That's all I'm saying.

MR. KOHN. Yes, but we can't play with what's--

MR. MORRIS. Well, let's take a look at 1986 then. In the years immediately preceding it, we were within the band; we weren't way below except for one point in 1984. So, you can't argue in the case of 1986 that we would have been making up for a big shortfall, because there wasn't a shortfall. Yet, here again, this constraint would have required us in 1986 to have followed a substantially more restrictive monetary policy. Now, 1986 was the year in which the average unemployment rate was 7 percent; the rate of growth of nominal

GNP was 2.2 percent; the rate of growth of the GNP deflator was 2.2 percent. I submit that anything that indicates that we should have followed a severely more restrictive monetary policy in 1986 does not meet my requirements for a common sense monetary policy. And I think the Committee would have abandoned it again in 1986.

MR. MELZER. Frank, do you know what reserves would have grown at in 1986 to meet the constraint on a quarterly basis? The answer is: 9 percent, 14 percent, 13-1/2 percent, and 12 percent. And that would have brought us inside the constraint. To me, that is very healthy reserve growth, taking into account what currency did. And it may well have necessitated much less of a reaction in the other direction in 1987.

CHAIRMAN GREENSPAN. What was the actual reserve growth?

MR. MELZER. It was 16 percent for 1986: 9.1 percent in the first quarter; 16.6 percent; 19.3 percent; and 19.4 percent.

MR. MORRIS. And that is because MI was growing very rapidly. These two are closely related indicators and they have the same components. You have currency plus the reserves against transactions deposits as against currency plus transactions deposits. And they're going to tend to move in a fairly similar fashion. The weight of currency is different. But, as you argue, where the base departs is typically where you have unusual growth in deposits. So, you can't expect MI to be something we had to get rid of as a target, and the monetary base, which is so closely related, to be something that would have given us a good guide to monetary policy during this period. It's hard for me to conceive that we would have gone through this period and not have been faced with a situation of either discounting the base as an indicator, or following a policy which, given the economic conditions, would have been a policy that was much too restrictive for the situation.

MR. MELZER. Again, Frank, one thing I would point out is this difference between a constraint and a target. If you were targeting the base, I don't know that you'd be setting a 4 or, as Don even mentioned, a 5 percentage point range. And in my mind, there is a big difference. If you widen that range out and you're only trying to pick up the excesses at the peak, that's a lot different than relying on a target. The second thing I would--

MR. MORRIS. But doesn't your system require that you try to get below 9 percent once you get above it?

MR. MELZER. That's correct. Well--or you wouldn't allow it to get above it.

MR. MORRIS. Well, I just think your own evidence suggests that it's not a workable guide to monetary policy.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I found both papers very interesting and really helpful. I think it would be very confusing to the public at large, and especially to Congress, if we had two different types of monetary control procedures--one a target and the other one a constraint. If

we ask ourselves why monetary targets were introduced in the first place, they were certainly not introduced or requested by Congress because they thought those were just some guidelines that we could flop over and under. There was clearly the intent that they be some kind of constraint, however binding. And if we suddenly introduce a second set of numbers -- one set a constraint and one set a target -- I think the public legitimately will ask what we are doing. Which one do you really take seriously? So the confusion that would result. I think, would be great. I think it would be useful, however, to include the monetary base among the other monetary targets, but I'd treat it on the same level as the existing targets. And one thing that's important, too, is what Don Kohn was saying--namely, that the behavior is likely to change once you introduce it as a target. For certain, once you introduce it as a constraint, the old statistical relationships probably won't hold anymore. In any case, that's where I would come out: I'd treat the two the same. I'd be in favor of having something on the short end, and because M1 probably misbehaves a little more than the base, the base is the better candidate at the short end of the spectrum.

MR. MELZER. Well, the only problem I have with that is that it just puts it in a category of things that don't really impact our policy decisions at all. I don't think the targets have a heck of a lot of credibility either within this room or outside this room. And I think what is proposed has the ability really to influence policy actions, at the extremes, in a very constructive way. And I don't know that you get that with what you're suggesting. It would be easier to explain; there's no doubt about it.

MR. HELLER. Well then, let's rename all the targets; let's call them all constraints or something like that. You know, I take the range seriously as [the growth rates] get closer to the borders, it influences the way I vote on the current monetary targets. But I don't take them as an absolute, if all other things would indicate going the opposite way. As President Morris was saying earlier: Would you go voluntarily into a recession that would otherwise not be necessary only to stick to that constraint? And the answer would be no. Immediately, you already set up these escape clauses too. So, I think they are very much the same as the monetary targets; and if they're not the same, then we should take the monetary targets as seriously as we take the constraint. I'm in favor of looking at it; among the various options that you have there, I would be strongly inclined not to call them two different things.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I found both papers very interesting, but I have some analytic questions that I think are relevant, as far as whether or not the base should be considered as either a target or a constraint. The work done by the Board staff suggests that the statistical properties of the monetary base are superior to those of other aggregates. The work we have done suggests just the opposite. As a matter of fact, the statistical properties of the base are inferior to those of M2. We have a much larger interest rate elasticity on the monetary base and our income elasticity of M2 is significantly less than that [for the base]. The difference appears to be a function of the period of estimation. The period of estimation in the Board's forecast goes back to the very early 1960s

and goes through the entire period. We think that the interest rate elasticity has probably increased in recent years and on the basis of our estimates, which run from 1978 through 1987, we find that the base actually has inferior statistical properties to M2. In any case, it appears as though there are significant amounts of shifts in the statistical properties that occur and I'm not sure we've paid enough attention to those kinds of shifts. They certainly could affect how reliable the monetary base could be as either a current constraint or a target in the period ahead. I guess I'd say that even though there has been a lot of analytical work done, maybe we ought to do a little more.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I have a lot of sympathy with what Tom is trying to do because I think his ultimate objective is to achieve price stability. I don't know how this Committee would vote on that, but I remember several years ago Chairman Volcker asked us what we thought the objective was and half of us voted for price stability alone; half voted the other way; and he didn't vote and didn't break the tie. But I think that is the ultimate objective, and I hear more and more people around here saying that. And I think Tom is trying to create a constraint that will make us really work toward that objective and not lose sight of it. But my problem with it is that even though he thinks this is a constraint, I believe, in practice, that it really might end up being used like a target. And our analysis, like Bob Parry's, suggests that M2 is really better for this in the sense of predicting the level of long-run inflation. And that, I think, is the thing we really ought to look at, rather than how well it predicts nominal GNP, since I don't think we can peg real variables over the long run. All we can do is affect the price level. So, what I would like to do is to carry the thing a step further than Tom has, and suggest we think about using total reserves and nonborrowed reserves, or something of that sort, as an operating instrument. What we have now is very akin to using free reserves, which has been fraught with problems the whole time. I know that there are some institutional changes that will improve this -- you could get rid of the reserve requirements against interbank deposits, [unintelligible] deposits, nonpersonal deposits, all those things. You could have a penalty discount rate. All those things could be done, assuming you can get the legislation for some of them. event, if we could work in that direction, then I think we'd have something that would really be very useful to us. Of course, one of the things we would want to analyze is what this might do to shortterm market rates, and I don't think we have a good handle on that. Most people think they would fluctuate a lot more; my instincts tell me that the private market would take care of that. And, even if they fluctuated more, I don't believe that would be transmitted to longterm rates to the extent that most people seem to be assuming. case, if we could use this as an operating variable instead of borrowed reserves, or the federal funds rate, or whatever people think it is we're using, I think it would be a very efficient way to try to achieve the very thing that Tom is advocating. Now, if it came down to a vote as to whether to do what he suggested or not do it, I would say do what he has suggested. I'd like to take it further than that, but I think it's better than what we now have, because it is a constraint. And we really don't have many constraints now, given our willingness to violate our target ranges on an ad hoc, judgmental,

basis. And I'd like a little more of a rule in there, a little more of a road map than we have, to the extent we can do it.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I'm very appreciative of the fact that there are so many members of this Committee who place price level stability in such high regard that they want to find some way to accomplish that [objective]. This proposal, it seems to me, is somewhat deficient in that regard in that it does not have within it a proposal that, in a sense, gets you to price level stability. I guess I see it as a way to live with 5 percent or 4 percent inflation, because 4 percent inflation can occur while maintaining this kind of constraint, so--

MR. MELZER. Wayne, those numbers are simply for the sake of example. What I've laid out is a framework. I think it would be up to the Committee to set the bands, so that's quite--

MR. ANGELL. Yes. Second, even though I call myself a monetarist, I've always been a discretionary monetarist. And I believe that there are some circumstances -- anyone who has read Irving Fisher, I think, would be aware of the fact that once you begin targeting money, and you cause money to be more scarce than it otherwise would be, you can alter the expected rate of inflation. As when you do, you get a shift in the demand for money. Now, it seems to me, that's exactly what occurred in 1986, with the worldwide deflation in commodity prices led by the plunging price of oil. Certainly, many of us were mindful of the fact that during that period of time we were getting some extreme numbers. And I remember in July, August, and September of that year looking very carefully at the commodity prices, which had turned around, and saying that we ought to put more restraint in place. And yet there were some who felt--and I think quite rightly so--that those countries with balance of trade surpluses were not engaging in action that was sufficient in regard to the survivability of the third world. And we thought it was essential, in some ways, to push the Bank of Japan and the Bundesbank to more expansionary programs. And we did this, with some risk, which made it necessary for us to follow a very different course of monetary policy in 1987. And there were those who were the strict rulemakers who told us at that point in time how disastrous it was going to be. Now, as it turns out, it wasn't disastrous for us to follow a very low growth path for the monetary base during 1987. It turns out that that seems to have been exactly the right thing to have done. can't find myself in a rulemaking camp versus a discretion camp. you want to be discretionary, then you have to ask yourself what you want to use for discretion. And I've made it very clear that commodity prices are very good signals in regard to money growth rates.

CHAIRMAN GREENSPAN. You have indeed. Mr. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Well, I probably have more sympathy for this, at this point, than I did the last time we talked but--

MR. STERN. That's not saying a lot!

VICE CHAIRMAN CORRIGAN. [Unintelligible] a storm going on here because my thinking is probably conditioned by my worries that we

could be making a horrible mistake in monetary policy here. I do have trouble, as I said before, with the base on a kind of intellectual level. A number of comments have been made on technical issues. But leaving those somewhat technical issues aside, I think what Tom is suggesting here is that there ought to be something -- whether or not it has to be precisely this -- something that makes us say "Hey, wait a minute" in a very, very deliberate, aggressive, forceful way. that's what I have more and more sympathy with, even though I must confess I can't really warm up to this particular proposal, for somewhat technical reasons. There are two systematic periods, using the numbers that Tom has picked, in which this thing went astray. One was in the early 1980s, and the other one, which Governor Angell was just talking about, was in 1986. Now, as Frank Morris pointed out, the Committee was aware that everything, including the base, was in the one case growing very slowly, and in the other case, growing very rapidly. But the Committee made a conscious decision -- not focusing on the base itself, but on other things that in some sense are symptomatic of the base--to ignore those. Why did they make that decision? I think the answer is, in a sense, quite simple. early 1980s, despite the fact that we were in what turns out to have been a hell of a recession, we also still had very high inflation In other words, the adjustment in the inflation process, while underway, was by no means finished and by no means locked in. was still some concern that the inflationary momentum of the late 1970s, 1980 and 1981, was still a demon that didn't have to just be wounded, but had to be stomped out. And so there was, I think, a conscious decision to be tolerant of those shortfalls. The same v The same was more or less true in 1986, in that the very rapid growth in the base and the other aggregates was in some sense tolerated because, among other things, the inflation rate, while certainly not zero, was low, partly for oil price reasons, and certainly not rising. And that leads me to the view that if a procedure like this were to have some functional utility, that utility might arise in a context in which there was some kind of a relationship between it and what, in fact, was going on with regard to inflation. Now, I don't want to get into the rules game, either way. But it's clearly one thing if the monetary base, or some other monetary measure, is outside of some range and the inflation rate is high and/or rising, as opposed to a situation where it's outside and the inflation rate is low and/or falling. At least in my mind's eye, if something like this were to have some utility in a policy framework, either implicitly or otherwise, somehow or other you would need to take it one step further.

MR. MELZER. Jerry, on those situations you commented on, I would just observe that those clearly would be situations, under the way this has been articulated, where the Committee could decide to violate it, and simply be obligated to explain it. And I think in both cases-

MR. ANGELL. But what would be the money market response if the money market knows that we have these guidelines and then we decide to violate them? Don't you think there would be an expectational impact upon the money market?

MR. MELZER. I think there could be, Wayne. But I think we're talking about a fairly extraordinary period--only two situations in eight years that might require that.

MR. ANGELL. Yes, but you see, by March or April of 1986, or by May at least, I presume we already were running up against that constraint. And if the marketplace had seen that out there, then the path of interest rates in April and May would have been affected by market expectations of the fact that that was there.

MR. MELZER. Well, in a sense, I think that's good. It would cause the Committee to think very carefully about whether or not we ought to be violating it. If we do, consciously, then we explain it. Right now when we violate a monetary growth range, we get into explanations of velocity. I just don't think that that is something that is bought by the public on a broad basis. It just sounds like you are talking your way around the issue with technical phrases and so forth.

MR. ANGELL. Well, not to the target range; I think that's right.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. Well, as others have said, I sympathize with the goal that Tom's seeking. If we had a vote today on the price stability goal, we'd probably get a much larger consensus. I'm not sure if anybody wants to take that, but I think it's critical that--

MR. MORRIS. We would have voted differently today.

 $\,$ MR. JOHNSON. Well, what I was going to follow up with is that there's a much more difficult technical issue. Even if you agree on the goal--if we had 100 percent consensus that price stability is what we all wanted, and I think probably almost everybody would say that today--you'd still have a whole lot of disagreement about what that means. Agreeing on the goal is an important first step, but then you'd run into all kinds of problems, like: Does that mean that we should jump with both feet on every big relative price swing? If there's an oil price shock, which is one big relative price in the economy obviously as it flows through, it's going to have some temporary effects. But what do we mean by temporary? It might have a two-year effect on the price level as it works its way through. What are we going to do about that? Does that mean every time one big relative price shocks the general price level on a temporary basis that we run out there and stomp it to death? We would get into all kinds of discussions about timing, about what price stability means. and what we would accept in the form of relative price effects that could affect the general price level for a while. But if you run out and try to deal with every relative price effect -- like import prices, which we've obviously agreed to absorb to some extent -- what are you going to do? If you deal with every one of those, you're going to be chasing your tail, I think. If you tighten up against a relative price shock, then you're going to potentially overshoot; as that filters through the economy, then it's going to create an overreaction on the downside at some point, and then you're going to be trying to work it back up.

So, to me, price stability means a long-run concept. And that may mean that you're never actually experiencing a perfect level of price stability where prices are hovering around zero. It has to mean that the mean is somewhat around zero; but even then you'd have

to admit that you want to accept periods of deflation. And I guess we could debate whether people think we ought to go through periods of deflation in order to keep the mean around zero. You can get into all kinds of difficult debates about what the proper measure of price stability is. Is it a broad index such as the CPI, PPI, the deflator? What is it? It's a difficult problem. But I still think that a goal of price stability, rather than, say, trying to improve the unemployment rate or maximize real output growth, is a step in the right direction. I think there was a time, probably, when that wasn't clear; some people would have said there was a Phillip's curve trade off and some acceptance of permanent inflation was worthwhile. I don't think that's true anymore, but I still think there is a difficult problem.

Before I get too hung up on the goals, I do want to say on this specific proposal, though, that I think it would succeed in damping the volatility of the base. Having upper and lower bounds or constraints, I think, would cause monetary policy to adjust early as you're approaching the bounds rather than deal with big roller coaster effects, and would probably damp the volatility of the base growth. You'd have a much more stable growth in the base; I think it would succeed in that. But the question would be whether that gets you anything. I think the ultimate issue as to whether this specific proposal would be worthwhile rests on whether the base is a better instrument of intermediate policy than any other aggregate or anything else we have. Don had indicated that the statistical properties of the base make it somewhat equivalent to M2, although Bob Parry's people debate that. My view is that even if you look at M2, you have serious money demand problems associated with M2. My big problem is that I am not convinced that money demand is stable, even in the long Look at what we have experienced over the 1980s. And there have been statistical studies in the past that have found long-run breaks in the trend in the money demand in the postwar period. All you have to do is look back earlier than the postwar period; there were decades when monetary velocity was actually on a declining trend. It only turned up in the postwar period. And there have been several detected structural breaks in it even since the postwar era. Nobody can predict when those breaks will occur, and that's the difficult problem. You can feel very satisfied about the statistical properties of the base and all of a sudden there could be some structural adjustment -- a long-term adjustment in the trend rate. Even though it may stabilize around this new trend rate, you might go two years trying to detect it. So, I think there is this fundamental problem with monetary aggregates. But, in saying that, I think the goal of people who want to target the monetary aggregates is a highly desirable one. That's why my preference has been to try and look at indicators like the interest spread, in conjunction with commodity prices and exchange rates. These are financial market indicators but they provide a similar type of goal to what people wanting to target the aggregates would want. I'm interested in the interest rate spread because I think that, especially under our operating procedure, that's how money is created and that's how liquidity is provided to the system. It's basically the spread between the funds rate and other rates that creates the lending incentives that take place, and of course, that determines, to some extent, the expansionary effects of money. It creates additional credit in the markets and that feeds back on the base. The way we do it now, we change the funds rate through the borrowing target, which changes the interest rate spread,

which creates new loans and feeds back on the base through reserves. And, you know, I think that that gives you some idea about the thrust of policy. I think that approach--

MR. HOSKINS. But don't you think that if you had a constraint you'd get a different shape in the yield curve? Do you think the yield curve would look the same as it does now if the markets were operating with this constraint in mind? I think that's the point.

MR. JOHNSON. Yes.

 $\,$ MR. HOSKINS. And that's clear information. The market is going to behave differently if it knows that constraint is there in terms of long--

MR. JOHNSON. Sure. I guess all I would say is that, yes, the yield curve might change. Obviously, as you got close to the constraint, long-term rate movements would probably be damped.

CHAIRMAN GREENSPAN. I think Lee is raising the point that if the market believed what we were doing, the long-term rates would be lower; hence, the yield spread would tend to be tilted differently from what it would otherwise be, to say the least.

 $\ensuremath{\mathsf{MR}}\xspace$. HOSKINS. If they believed that the base was a real constraint.

MR. JOHNSON. It could, but I think still the question is going to be whether that aggregate --. You know, you can get all kinds of yield curve relationships associated with that. You might get much better behavior on the long end of the market. But it's not hard to get long bonds to behave well. We could run the fed funds rate up to 20 percent today and I can assure you we'd get very good performance on the long end of the market. I think it's pretty predictable; if you create expectations of a recession, you can invert the yield curve quite nicely. But I don't think that's the ultimate goal, unless what you want is a level of expansion consistent with price stability-whatever that is, exactly. I don't know exactly what yield curve determines that, but it's not a negative slope. It might be close to flat but who knows exactly. I don't know where that leaves me, except that it requires a lot of discretion at the moment. It really requires filtering a lot of information. I think getting the goal right, and maybe even having further debate on fleshing out these goals, would allow this process to work even better. You're always going to have differing opinions when you have 19 people sitting around a table. But I've been amazed at how well this process sort of filters all that information into a pretty good consensus. So where do we need to go? If we could get the goals down a little better, we would probably do all right.

MR. MELZER. One thing I'd say, Manley, is that there's no way around it: our business is money--whether we like it or not and no matter how difficult it is. And I think people would generally agree that inflation is a monetary phenomenon.

MR. JOHNSON. I don't disagree with that either.

MR. MELZER. And, finally, I think in our discussion at the last meeting, people who have had a lot of experience around this table kind of spelled out the difficulties we have if we view our business as being one of interest rates and don't have some kind of a counterbalance based in money and reserves. To do that just because of the inherent opportunities--

MR. JOHNSON. What I'm saying is that it's a proxy; that's always been the intermediate target to get to price stability, or whatever the goal was. Money growth isn't an end in itself; it's only an intermediate step toward what your ultimate goal is. I'm just saying that there are a lot of potential intermediate approaches to use to achieve the same end result. If we all have the same end result, we could have a slightly different view about what the intermediate steps ought to be but still reach a consensus on policy that would probably make us all happy. The base would probably perform better; my own indicators would perform better; Wayne's commodity prices would perform better. I think we would all generally be happier.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I think most of the useful things that can be said about this really quite excellent paper have been said. My bottom line is that I'd like to find a rule that would keep us on track in terms of good policy. I don't know what that rule is. I don't think the base is it, largely for the same reasons that I think M1 is not it. That doesn't mean we shouldn't keep working at it. But I don't have enough confidence in this to give up much discretion at all in terms of policy. So, whatever we would like, I think it simply isn't a reality; so I think we have to continue much as we have been.

MR. BLACK. Even if you could find a perfect rule, I doubt the Committee would vote for it, because it's so much more fun making ad hoc decisions every time.

MR. MELZER. And that hurts again.

MR. KELLEY. It means you recognize what you saw.

MR. BLACK. I mean I'm assuming away that problem; I still think we would vote for discretion.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Tom, let me ask you to comment on something a bit more mundane and workaday. I think how we employ a device such as this has a lot to do with whether or not it's useful in the first place. And I wonder how we could reliably use it without so diluting it that it becomes punchless. As I look back four quarters, and also include the current quarter, I notice that the first month in four out of the five quarters grossly exceeds the parameters on the upside. Then are those--

MR. MELZER. Where are you looking?

MR. KELLEY. Well, I have a chart here that the Board's staff puts out on annualized growth rates on a month-by-month basis; it

doesn't go back very far but it does go back a year; and it includes April, so I'm taking the liberty of including this quarter. For some reason--and maybe there is a reason--[monetary growth in] the first month of each quarter, four out of the five times, is way over the parameter. On both sides of the first months, there are much lower figures. And I ask myself what we would do if we [were operating under] your proposal. It says that no quarter would be permitted either to exceed the upper limit or fall below the lower limit. Well, in four of the last five quarters--taking the liberty of including this one--you have a huge number in the first month, which kind of comes out of the blue, because it follows two much lower months, and then in turn, is followed by two much lower months. And I ask myself what would we be liable to do if we sat down at this table when we just got a brand new figure that was way over [the upper limit] in the light of the pattern we have seen here in the last year or so. How could we protect ourselves against that phenomenon?

MR. MELZER. What the proposal envisions is the average growth rate for the next quarter from the prior quarter's average. Are you looking at growth rates. Mike?

MR. KELLEY. Yes.

MR. MELZER. Okay. So, first of all, what would the first month in one of those quarters you were talking about imply in terms of level for the average of the quarter?

MR. HELLER. Yes, Mike is saying you look at the first month, but then you're really--

 $\,$ MR. MELZER. Well, let me put it in the context of where we are right now.

MR. KELLEY. If you look at the first month, it's like the kind of thing that Peter deals with every day, with regard to the maintenance period. For instance, let's take October: the October number was 11 percent on an annualized basis. It was followed by November at 6.9 percent and December at 3.1 percent; it averages out fine. But if we had sat down here and looked at that 11 percent in October we might have been moved to do something precipitous.

MR. MELZER. Well, first of all, I think the staff would have some ability to project what they expected to happen in terms of the growth [vis-a-vis] what we were trying to hit as an average for the quarter. There could be a circumstance where it would require some response reasonably early in the quarter. If you look at where we are right now in this quarter, we are probably right at, or preciously close to, the level that would be permitted by a 9 percent upward bound.

MR. KELLEY. April was 12.3 percent.

MR. MELZER. Okay. But you just can't look at the monthly growth rates; I think you have to look at the level. And, if I looked at these correctly--I'm looking at the St. Louis base--we are roughly at where I think a 9 percent constraint would be, or a little below it. So, you would have to be asking yourself at a meeting like this: Should I be taking a step now to slow that thing down?

CHAIRMAN GREENSPAN. Then what happens on July 1st? In other words, suppose you take a specific action that drives it down.

MR. MELZER. Yes.

CHAIRMAN GREENSPAN. All constraints legally come off as of the beginning of the next quarter?

MR. MELZER. Right.

CHAIRMAN GREENSPAN. Wouldn't you really want more of a rolling three-month average rather than an actual quarterly system? A quarterly system works very much like the maintenance period, where you could end up at the end of the period with some crazy stuff going on.

MR. MELZER. I guess to the extent I thought about that part of it, I've just been looking at the average for one quarter in relation to the average for the next. I would think you could do it well.

MR. KELLEY. That wasn't meant as a criticism, just as a problem you have to work through if it's going to be useful.

MR. MELZER. Yes.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I have some considerable sympathy for this proposal, but I don't think we ought to ask too much of it, in the sense that I don't think it's going to accomplish something that is always going to have us do the right thing. But the merit I see in it, relative to current procedures, is that it does put the monetary aggregates back into the policy process—in my judgment, in a more meaningful way. I think it adds some automaticity to our response relative to the current process, at least at the extremes, and I think that's important. Maybe that's the same thing. The third point I would make is that, under some circumstances, I think it will make us less reactive and more anticipatory. And for those reasons, I think that this, at the least, merits a more serious consideration.

CHAIRMAN GREENSPAN. Anyone else who wishes to make a comment who hasn't yet?

MS. SEGER. I just have one question.

CHAIRMAN GREENSPAN. Sure.

MS. SEGER. I read these papers with great interest. Would it be possible to run something like this off the shelf? In other words, not publicly announce that we're going to change, but act internally here as if we were trying it for six months, and just sort of simulate what the decision-making process would be?

MR. MELZER. Sure. I would think that would be quite possible, wouldn't you Don? Not to make decisions--

MS. SEGER. [We could try it] between now and, say, the end of the year or something like that; and if it did turn out to have real working potential, then put it in the Humphrey-Hawkins [report] next February.

 $\,$ MR. JOHNSON. The problem is you would never get the market's response to the changes.

CHAIRMAN GREENSPAN. That's what makes it tough to do.

MR. JOHNSON. The behavioral adjustments that would take place are not there that way.

MR. HOSKINS. I think Martha raises a good point. It would give us a chance to take a peek at it when--

MS. SEGER. It's better than looking backwards, which is what you're doing statistically

MR. HOSKINS. You're right.

MR. JOHNSON. You could at least see when you would be faced with a decision.

MS. SEGER. Yes.

MR. HOSKINS. You would be losing half the power. The power is the market's response to this rule, or this constraint, or governor, or band, or whatever you want to call it. That's the power of it.

MR. FORRESTAL. Well, wouldn't we be better off to test it just for a while, before locking ourselves into a statutory requirement or market expectation? I think that makes a lot of sense.

MS. SEGER. Well, it's just an idea.

MR. BLACK. But, at a minimum, you have to tell the [Congressional] Committee next time in the Humphrey-Hawkins [testimony] that we have either rejected it, or we are looking at it and have not yet decided whether to accept it.

CHAIRMAN GREENSPAN. I was sitting here keeping score. Tom did marginally better than the Orioles, but not much.

 $\,$ MR. HOSKINS. But he did a lot better than when he first brought it up!

CHAIRMAN GREENSPAN. However, I also kept score on the general sympathy for what it is you're trying to do. And I get the impression that what we're looking for here is more something to keep us off the path of an inadvertent acceleration of inflation. If that's the case, then what we haven't done yet is to evaluate some particular vehicles that would give us that sort of indication; that's the issue Jerry really was raising. Can I suggest that at this particular stage we rephrase the problem, not as a Tom Melzer issue, but as an FOMC issue. Let's see whether or not we can look not at the usual targeting characteristics, but strictly at the inflation

question. To give you an example: if the long-term income velocity of M2 doesn't show any significant secular trends, it means, effectively, that the GNP price level, the implicit deflator, is a close function of unit money supply defined in M2. If you go further and substitute capacity for real GNP, and cyclically adjust the price--if you can actually get that--what you're basically trying to do is to get a relationship between, say, M2 divided by capacity on the one hand--or a bit more exactly, that as a long-term indicator of price, and the inflation rate being the first difference. But, if we could get some general notion--it doesn't have to be on a monthly basis, but just as a basic thrust--I think it would capture some of the issues that we're grasping for. Heaven knows, I think we are all acutely aware that chasing interest rates, ultimately, is going to throw us off the cliff at the end. And, while there is no real strong support for Tom on this issue, I think starting from where he started and expanding from there may get us something that we might find particularly useful. Now, I just suggest that. Does anybody have any notions as to where we go from here, granting that we don't like this specific proposal?

MR. BLACK. I think you're right, Mr. Chairman; that's the way I viewed it. I tried to take it a little farther in the direction that I thought it ought to go, which nobody else will agree with except maybe Tom Melzer and Lee Hoskins. I think that can be very productive.

MR. MELZER. I think there's an advantage to having something in that type of equation that relates to what we do day-to-day in carrying out monetary policy.

CHAIRMAN GREENSPAN. Well, yes; but remember if we have M2 in that equation, which is what would be in the one I was using, for example, that's really suggesting the nature of the noninflationary M2 target. It's a target which basically diverts itself from nominal GNP and gets away from the business cycle. It's basically looking at the long-term targets of policy which we view as noninflationary. I think we all know from our analytical work that the relationship between price and money has been a very tough one to grab. In fact, we have created such huge lags between money and prices that it gets you to wondering whether you're leading the next cycle or lagging the previous one. And I think that creates difficulties. If we have some longer-term thrust, at least we know where we're going out of line for two years. I don't think we can target any less than that.

MR. BLACK. I would like to see us use multiple-year targets, if we can ever get to the point that we could agree on that. I think it's an exciting step.

CHAIRMAN GREENSPAN. Well, does anyone have any objection to asking Don to see whether or not he can put his people to work? If anyone has any other thoughts to throw in the hopper, it might be useful.

MR. ANGELL. Well, Tom, would you object to paying more precise attention to M2 right now? Is there anyone here who believes that 8 percent growth of M2 is consistent with our price level stability goals?

MR. JOHNSON. Yes, I do; I think it might be.

MR. BLACK. I don't--not in the long run. I think it's the best predictor of inflation of any of the aggregates we have now.

MR. JOHNSON. I don't know. I mean, you have to tell me what's happening on the demand side.

MR. ANGELL. I cannot tell you.

CHAIRMAN GREENSPAN. The question is if M2 velocity secularly is flat, then you're--

MR. JOHNSON. If you make that assumption, I agree with you completely. But I'm saying that's one hell of a big "if", because that's not what it has been doing the last few years.

MR. BLACK. It hasn't been too far from that.

MR. JOHNSON. Well, it has been a long way from zero.

 $\,$ MR. KOHN. You have to go over a long period of time and you still get zero but--

MR. JOHNSON. Yes, if you go back--

 $\,$ MR. KOHN. Over a period of eight years it has been substantial--

 $\,$ MR. MORRIS. But the problem is that the character of M2 has changed quite dramatically in recent years.

MR. JOHNSON. No doubt about it.

MR. MORRIS. It used to be that M2 paid a below-market rate. Now it pays a market rate. And there is no way that you can take the old data on M2 and come up with any conclusions that will permit you to forecast the M2/GNP relationship in the future.

CHAIRMAN GREENSPAN. Regrettably, that is a legitimate criticism.

MR. KOHN. Except that our equations on M2 aren't doing that badly once we take into account the opportunity cost changes.

CHAIRMAN GREENSPAN. Well, why don't we take a shot at it; and we will report back to you and see where we go from there.

MR. KOHN. Any and all inputs from Reserve Banks--

MR. BLACK. You want to implicate us!

MR. JOHNSON. Don, since when has it been doing better? It's been what--a few quarters, right?

MR. KOHN. No. no.

MR. HELLER. But the demand for money has gone through--

MR. KOHN. The demand equation, once it takes account of the interest rate changes, hasn't been that far off over the last several years. But the velocity changes--

MR. JOHNSON. Can you predict the interest rate movements? Because if you can't, you're in big trouble.

MR. KOHN. That's the problem, which is what we said--

 $\ensuremath{\mathsf{MR}}\xspace$. JOHNSON. It just gets you into interest rate forecasting.

MR. BLACK. If you can predict the prices, do you need to predict the interest rates?

MR. JOHNSON. No. That's my whole point. That's why I'm saying I've been looking at these other indicators that seem to do a better job than prices.

MR. BLACK. I don't always understand these things, but weakly I'd suggest that it is a pretty darn good predictor of the price level.

CHAIRMAN GREENSPAN. Well, can I terminate this conversation now, and just suggest that we will report back? If we don't, we're going to break all records on the length of an FOMC meeting.

MR. MORRIS. I'd say we won't break 1979, Mr. Chairman.

MR. ANGELL. October 6th.

MR. JOHNSON. How long did that one last?

MS. SEGER. Probably three days.

CHAIRMAN GREENSPAN. Do we have some lunch? We can now go into our luncheon session.

END OF MEETING